

Thermetic

TILTING BOILING PANS, ROUND, ELECTRIC

(GU.....,
KU.....)



US

OPERATING AND SAFETY INSTRUCTIONS



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I. GENERAL INFORMATION

1. INSTRUCTIONS FOR SAFETY AND USE

1.1 INSTALLATION AND INITIAL OPERATION

- ▲ The installation, adjustment and initial operation of the appliance must be carried out according to the manufacturer's instructions and only by an authorised specialist.
- ▲ Installations for the supply of electricity and gas must be carried out by approved specialists in compliance with specific national and local regulations. They bear the responsibility.
- ▲ The appliance must not be placed in operation until the user has become familiar with its operation. The operating instructions and the related safety precautions must be followed precisely. Follow strictly the attention and warning label indications on the appliances.



1.2 OWNER'S OBLIGATIONS

- ▲ The manager is responsible for ensuring that all components relevant for safety are in perfect working order at all times. The operating condition of these components must be examined by an authorized technician at least once a year and any defects remedied if required.
- ▲ If the safety valve in the boiler blows off, after-sales service must be requested without delay to establish the cause and remedy it.



1.3 USE AS PRESCRIBED

- ▲ The appliance must only be used for cooking food in commercial kitchens. The appliance has only been approved for supervised operation by trained persons.
- ▲ Closed containers (jars, cans, bottles, tubes, etc.) must not be heated owing to the danger of bursting and injuries.
- ▲ The appliance must not be filled above the level mark 4 cm below the boiler rim. Depending on the type of food to be cooked, filling must be less so as to prevent bubbling over.
- ▲ The stirrer is only to be operated with the lid closed.
- ▲ The stirrer may be used no more than 3 hours under heaviest load (e.g. mashed potatoes).
- ▲ During operation, no objects are to be placed on the lid
- ▲ The safety valve on the outer jacket of the boiling pan must not be actuated by operators (lifting or turning the cap) because hot steam is released, causing injuries.



1.4 SAFETY-CONSCIOUS WORKING

- ▲ Devices on wheels set up in block configuration must be checked before each start-up whether the potential equalization is connected with the neighbour equipment. The connection may be done only by authorized technical personnel.
- ▲ Spraying the appliance or parts of it with a **high-pressure cleaning device** may cause malfunctions and is not to be done.



- ▲ To avoid damage to the appliance, do not let water flow from the mixer tap onto the cooking plates.
- ▲ When putting oil, fat, water or ingredients in the preheated hot boiler, they may splash - **danger of burning!**
- ▲ Always use the handle to open the cover. Note that while doing so, hot air or steam may flow out or hot fat may spit out - **danger of burning!**
- ▲ Keep your distance from the lid closing area when closing the lid - **danger of injury!**
- ▲ To avoid damage to the appliance the mixer tap outlet must be to the front before the lid is opened or closed.
- ▲ Cold food is not to be added to the unit for rethermalization while hot food is operating in a hot food holding mode.
- ▲ Take care when turning on the drain tap. Depending on the food to be cooked, the drain stream can have varied behaviour and Keep your distance when passing or driving by with a truck. The drain cock sticks out.
- ▲ Tilting is only to be carried out slowly to avoid the contents spilling over the rim.
- ▲ Hot steam can be expelled on opening the lid. Staff must take appropriate measures (stand well back) to avoid injuries.
- ▲ Appliances on wheels must be fastened with the wall.
- ▲ The area around the tilting boiling pan must be kept free. Tilting is only to take place with the lid fully open. - **danger of burning!**



1.5 AFTER-SALES SERVICE AND REPAIR

- ▲ Boiling pans of this design and operating mode do not require special acceptance tests. They are subjected to a pressure and operating test which meets the regulations on the manufacturer's premises. Recurrent pressure testing is not compulsory. To ensure the complete operating efficiency and safety of appliances, however, owners should arrange for personnel authorised by the manufacturer to check on all safety equipment and to conduct pressure tests at regular intervals.
- ▲ In the event of a permanent fault which interferes with operation, the appliance must be switched off and disconnected from the power supply.
- ▲ Repair, maintenance work and other adjustments are only to be carried out by an authorized specialist. The valid local and national regulations must be observed. This applies especially to burners, ignition, safety and control elements. Parts requiring replacement are only to be replaced by original spare parts. Periodic tests for gas leaks must be carried out. A service contract is recommended.
- ▲ Cleaning and maintenance must be done only when the heating surfaces are cold. Do not use inflammable liquids to clean the appliance.
- ▲ **An obligatory service check is required annually.**



2. TECHNICAL DATA

PNC Appliances	Appliance type	Width Depth Height	Feet, Wheel Height	Electr. Power	Net weight	Boiler size
		mm		kW	kg	lt. (gal)
9CHG582431 9CHG582464 9CHG582465	GUWCOEOOOO GUXCOEOOOO GUYCOEOOOO	1200 900 700	200	18.2	195	80 (21.1)
9CHG582469 9CHG582470 9CHG582558	GUWEOEOOOO GUXEOEOOOO GUYEOEOOOO	1200 900 700		18.2	230	100 (26.4)
9CHG582559 9CHG582560 9CHG582561	GUWEOEWOOO GUXEOEWOOO GUYEOEWOOO				270	
9CHG582562 9CHG582563 9CHG582564	GUWEOEOOOZ GUXEOEOOOZ GUYEOEOOOZ				280	
9CHG582565 9CHG582566 9CHG582567	GUWHOEOOOO GUXHOEOOOO GUYHOEOOOO	1300 900 700		24.2	270	150 (39.4)
9CHG582568 9CHG582569 9CHG582570	GUWHOEWOOO GUXHOEWOOO GUYHOEWOOO				310	
9CHG582571 9CHG582572 9CHG582573	GUWHOEOOOZ GUXHOEOOOZ GUYHOEOOOZ				320	
9CHG582574 9CHG582575 9CHG582576	KUWJOEOOOO KUXJOEOOOO KUYJOEOOOO	1400 900 700		30.2	360	200 (52.8)
9CHG582577 9CHG582578 9CHG582579	KUWJOEWOOO KUXJOEWOOO KUYJOEWOOO				400	
9CHG582580 9CHG582581 9CHG582582	KUWJOEOOOZ KUXJOEOOOZ KUYJOEOOOZ				410	
9CHG582583 9CHG582584 9CHG582585	KUWKOEEOOOO KUXKOEEOOOO KUYKOEEOOOO	1500 900 700		36.2	390	300 (79.3)
9CHG582586 9CHG582587 9CHG582588	KUWKOEWOOO KUXKOEWOOO KUYKOEWOOO				430	
9CHG582589 9CHG582590 9CHG582591	KUWKOEOOOZ KUXKOEOOOZ KUYKOEOOOZ				440	
9CHG582592 9CHG582593 9CHG582594	KUWLOEOOOO KUXLOEOOOO KUYLOEOOOO	1500 900 700		48.2	420	400 (105.7)

PNC Appliances	Appliance type	Width Depth Height	Feet, Wheel Height	Steam Power	Net weight	Boiler size
		mm		kg/h 0.8bar	kg	lt.
9CHG583388 9CHG582595 9CHG582596 9CHG582597	GU1COE0000 GU2COE0000 GU3COE0000 GU4COE0000	1200 900 700	200	40	195	80 (21.1)
9CHG583389 9CHG582601 9CHG582602 9CHG583239	GU1EOE0000 GU2EOE0000 GU3EOE0000 GU4EOE0000	1200 900 700		48	230	100 (26.4)
9CHG583240 9CHG583241 9CHG583242	GU2EOEW000 GU3EOEW000 GU4EOEW000				270	
9CHG583243 9CHG583244 9CHG583245	GU2EOEO00Z GU3EOEO00Z GU4EOEO00Z				280	
9CHG583390 9CHG583246 9CHG583247 9CHG583248	GU1HOE0000 GU2HOE0000 GU3HOE0000 GU4HOE0000	1300 900 700		63	270	150 (39.4)
9CHG583249 9CHG583250 9CHG583251	GU2HOEW000 GU3HOEW000 GU4HOEW000				310	
9CHG583252 9CHG583253 9CHG583254	GU2HOEO00Z GU3HOEO00Z GU4HOEO00Z				320	
9CHG583391 9CHG583255 9CHG583256 9CHG583257	KU1JOE0000 KUWJOE0000 KUXJOE0000 KUYJOE0000	1400 900 700		77	360	200 (52.8)
9CHG583258 9CHG583259 9CHG583260	KUWJOEW000 KUXJOEW000 KUYJOEW000				400	
9CHG583261 9CHG583262 9CHG583263	KUWJOEO00Z KUXJOEO00Z KUYJOEO00Z				410	
9CHG583392 9CHG583264 9CHG583265 9CHG583266	KU1KOE0000 KU2KOE0000 KU3KOE0000 KU4KOE0000	1500 900 700		100	390	300 (79.3)
9CHG583267 9CHG583268 9CHG583269	KU2KOEW000 KU3KOEW000 KU4KOEW000				430	
9CHG583270 9CHG583271 9CHG583272	KU2KOE000Z KU3KOE000Z KU4KOE000Z				440	
9CHG583393 9CHG583273 9CHG583274 9CHG583275	KU1LOE0000 KU2LOE0000 KU3LOE0000 KU4LOE0000	1500 900 700		122	420	400 (105.7)

3. PACKAGING

All the packaging materials used are environmentally friendly. They may be burnt at an incineration plant or sent for recycling.

4. TESTS / CERTIFICATES

All electrical appliances are UL 197 and NSF/ANSI 4-2002 and NSF/ANSI 8-2002 tested. Appliances with Chilltherm are NSF/ANSI 7-2001 tested.

The appliance noise level is negligible. The statutory guidelines are fulfilled; the sound pressure level is less than 70 dB (A).

5. SPECIFICATION PLATE

The specification plate (E) is located in each case inside and outside on the right of the control panel (C).

6. SERIAL NUMBER YWWXXXXX

The serial number of the appliance is marked on the type plate. The 8 digits give following information:

Y last digit of the year of production
WW week of production
XXXXX running number

7. FURTHER DOCUMENTS

- Installation instruction
- Service manual
- Wiring diagram
- Spare parts list

II . OPERATING INSTRUCTIONS

1. DESCRIPTION

The round, tilting boiling pan is suitable to cook, saute, poach or steam all kinds of produce. The appliance is floor mounted on the two brackets or wall mounted on brackets and cross-beams.

The produce is uniformly heated in the base and side walls of the boiling pan by steam or hot water by an external jacket.

The appliance is totally constructed externally and internally of corrosion-resistant chrome nickel steel. The inner pan in which the food is contained is of chromium-nickel-molybdenum steel. The lid, mounted on the cross-beam is counterbalanced by a special hinge, i.e. it remains open in all positions set higher than 15° and closes at positions set at less than 15°.

A precise, state-of-the-art electronic microprocessor control system with digital preselection of temperature, cooking time and starting time ensures perfect adherence to the pre-programmed cooking functions.

Appliances fitted with direct steam or hot-water heating can also be fitted with manual control over the power supply.

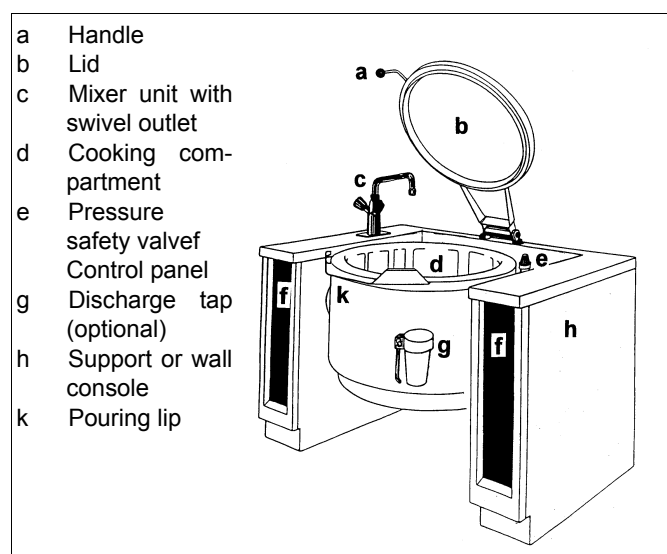


Fig. 1 Construction

2. INITIAL COMMISSIONING

The jacket is filled by the works with demineralised water. All pan models are supplied ready for use. Thoroughly wash out the cooking compartment with soapy water, rinse with fresh water and allow to dry. The appliance should then be heated for approx. 30 min. at a temperature setting of 100 deg.C.

3. STANDBY

Check each time before use

The (optional) safety discharge tap must be correctly installed and closed. Operating elements and pressure gauge must not be damaged

Filling with produce

Fill with water via mixer unit or hose. The compartment must not be filled beyond the maximum capacity mark, 4 cm below the rim. If necessary and dependent on the food being cooked, a smaller amount of food must be used to prevent bubbling over.

Salt is only to be added in dissolved form. It must not be added to an empty pan. Use only a wood or plastic spatula for stirring.

Heating up times

After filling with liquid produce, the appliance can be switched on. The lid should be kept closed during heating to reduce energy losses and heating time. At full power, the maximum heating-up times from 20° to 90°C for pans full of water correspond to the values listed below. Heating-up times are reduced when pans are only partially filled; when the pan is only half full, the heating-up time is reduced to approx. 65%. The heating up times are lower or identical to those for the fast cooking boiling pans. Whilst full power is required for initial heating, this is not the case for further cooking. The power requirements for cooking with lid open is many times that with the lid closed. The lid should therefore always remain closed during cooking.

Pan type	Electric		Steam
	electrical		direct steam
Heating			0,8 bar (11.6psi), 118°C (118°C)
Capacity	Heating up times in minutes		
litres	gal		
80	21.1	24	19
100	26.4	30	21
150	39.4	34	23
200	52.8	36	26
300	79.3	45	30
400	105.7	46	33

0.8 bar (5.8 psi), overpressure, temperature 244°F (118°C)

4. AUTOMATIC CONTROL

The automatic controls can be fitted with more or fewer functions.

The following instructions explain all the possible functions.

4.1 Setting the clock

The clock time is shown on the **display (AZ)**.

Switch on the **power isolator (H)** (only available as an option) and the **control system switch (S)** by turning them from position 0 to I.

0 = Off

I = on

Then press and hold down **buttons (ZT)** and **(Q)**. After the second acoustic signal, the clock time can be set by turning the **knob (Z)**.

Turn right = increase

Turn left = reduction

Smallest change = 1 minute

After the time has been set, the **buttons (ZT)** and **(Q)** can be released again.

4.2 Starting

The pan must be in the horizontal position prior to starting, or the power supply must be disconnected.

Switch on the power isolator (H) (only available as an option).

Turn from position 0 to I.

0 = Off

I = on

H Switch on the power isolator (only available as an option)

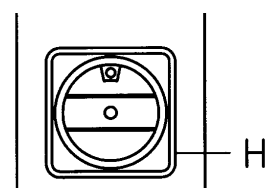


Fig. 2 Right-hand console (at the bottom)

4.3 Automatic cooking

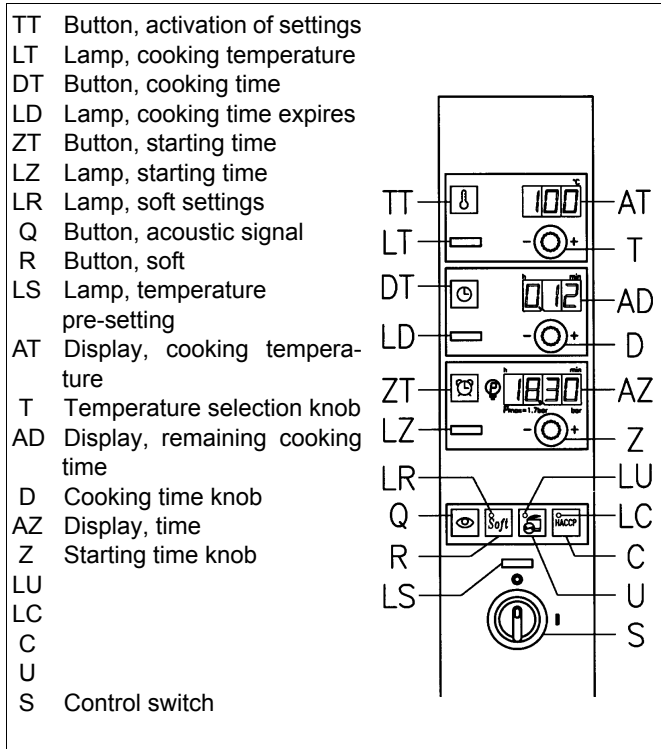


Fig. 3 Right console

Switching on

Switch on the control switch (S) turn from position 0 to I. This switches on the temperature pre-setting function. The lamp (LS) lights up.

0 = Off

I = on

Set the desired cooking temperature (flashing nominal value) with the temperature selection knob (T) on the display (AT).

Turn right = increase

Turn left = reduction

Smallest change = 1°C

Programming the cooking time and the starting time (or only one function).

Pressing the button (DT) switches on the programme for the cooking time (flashing nominal value). The desired cooking time is set with the cooking time knob (D) on the display (AD).

Turn right = increase

Turn left = reduction

Smallest change = 1 minute

The lamp (LD) only lights up when the desired temperature has been reached and the cooking time expires.

Pressing the button (ZT) switches on the programme for the starting point (flashing nominal value). Set the desired starting time with the starting time knob (Z) on the display (AZ).

Turn right = increase

Turn left = reduction

Smallest change = 1 minute

The acoustic signal will sound three times and the lamp (LZ) will light up when the starting time has been reached.

The following pre-programmed nominal functions

Cooking temperature

Cooking time

Starting time

are all activated by pressing the button (TT).

The following displays

Cooking temperature (AT)

Remaining cooking time (AD)

Clock time (AZ)

indicate the current value.

The lamp (LT) will continue to flash until the nominal cooking temperature is reached. It then stays on permanently.

4.4 Temperature and power settings

Temperature setting

If the nominal temperature set on the display (AT) is below the boiling point of water (26 - 212°F (97 - 100°C)), this temperature will be attained during heating up and then maintained at this value by the electronic controls and the careful supply of energy. The nominal temperature is not exceeded in this process.

When certain foods with poor conductivity are heated, such as sugar solutions, nominal temperature settings between 212 and 230°F (100 - 110°C) are required in order to achieve boiling. The correct setting is largely a matter of experience.

Power setting

Fixed power settings can also be programmed in using the electronic controller. In this case, the pre-set energy is supplied to the food after boiling point has been reached. Setting the controller to fixed power settings is done in order to enter the degree of boiling in the food individually, i.e. dependent on the type of food, the amount of food, the position of the lid, etc. The following fixed power settings can be entered on the display (AT):

Setting (AT)	Power %
L1	6
L2	12
L3	25
L4	37
L5	50
L6	62
L7	75
L8	87
L9	100

HOLD setting

The HOLD section is located above the power adjustment L1 - L9. The knob (T) is used to set a HOLD temperature between 122°F and 210°F (50 and 99°C).

HOLD temperature set: A three digit display (AT) indicates:

H for Hold,

22 - 85 the temperature between 122 and 185°F

03 - 10 the temperature between 203 and 210°F (

Owing to the internal conversion in °C not every value is possible. The following settings are allowed:

Display	Hold-Temperature °F
H22	122
H31	131
H40	140
H49	149
H58	158
H67	167
H76	176
H85	185
H94	194
H03	203
H10	210

The programmed cooking process then operates as follows: the food is first heated to simmering temperature (approx. 212°F). When simmering temperature is reached, the energy supply is switched off. The food cools down and is then kept at the HOLD temperature that has previously been set.

4.5 Shutting down

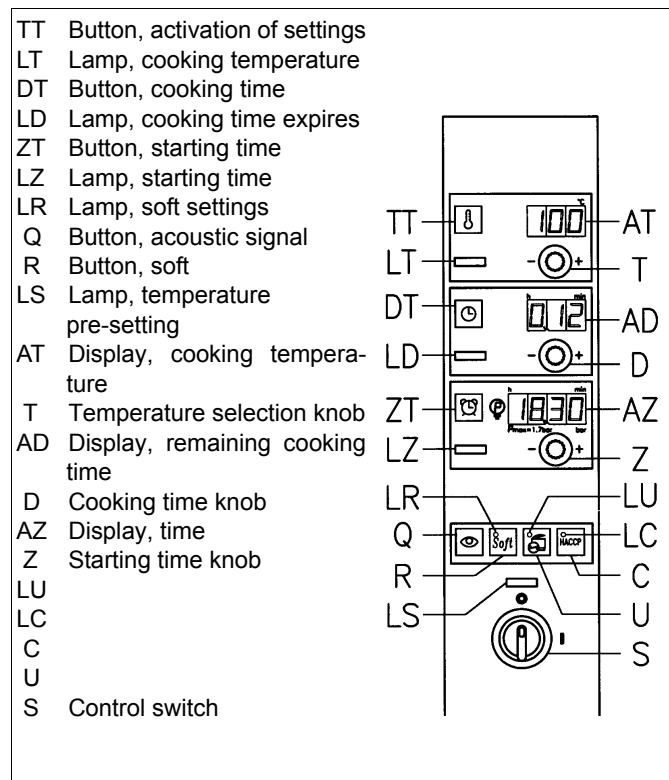


Fig. 4 Right console

An acoustic signal sounds when cooking is over. This is acknowledged by pressing the button (Q).

The power supply is then switched off.

All activated functions are subsequently switched off:

- Press the pre-set temperature button (TT) for some seconds.
Lamp (LT) goes out.
- Press the cooking time button (DT).
Lamp (LD) goes out.
- Press the starting time button (ZT).
Lamp (LZ) goes out.
- Switch off the Soft button (R), if this was activated.
- Switch off the control switch (S).
- Turn from position I to 0. Lamp (LS) goes out.
0 = Off
- Switch off the power isolator (H) (only available as an option).
- Turn from position I to 0.
0 = Off

After cooking has been completed, the control switch (S) is switched off.

- Turn from position I to 0.
The lamp (LS) goes out.
0 = Off

Switch off the power isolator (H) (only available as an option).

- Turn from position I to 0.
0 = Off

The appliance can be switched off before cooking has been completed.

If the function buttons (TT), (DT) and (ZT) are switched on and switching off is only done by means of the control switch (S), all the functions and previously set data for temperature, cooking time and starting time remain saved and active when the switch (S) is turned on again.

If the appliance develops a fault, the electrical switch in the building must also be switched off.

4.6 Additional functions

SOFT

Pressing the Soft button (R) adapts the power supply to the food, i.e. reduces it. The lamp (LR) on the button (R) lights up if the soft setting has been switched on. The following functions are activated by pressing button (Q):

1. All displays
 - Food temperature (AT)
 - Cooking time (AD)
 - Starting time (AZ)
 flash indicating the nominal value that has been programmed in.
2. Acknowledgement of the acoustic signal when cooking has been completed.
3. Acknowledgement of error messages (see section 12, Troubleshooting).

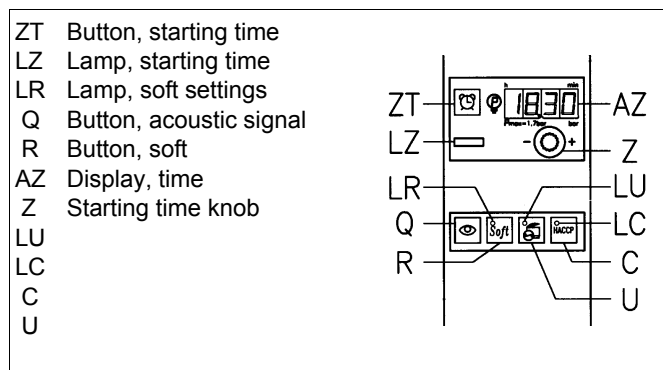


Fig. 5 Right console

Cooking using the SOFT setting

Normally (Soft setting deactivated), the food is heated up at maximum power and in the shortest possible heating-up time. This method of operation is suited to food with a high water content and which has good heat conductivity properties.

When maximum power is used to heat them up, viscous, pasty and difficult to heat food (dairy products) tends to dry out along the heated surface of the pan, to turn dark and to burn. When the Soft setting is activated, the heating power is automatically adapted via the temperature difference to the type of food. Heating-up times are extended a little although the pre-set temperature is reached without the food sticking or burning.

CLOCK TIME

Display (AZ) shows the clock time and display (AT) shows the actual temperature of the pan when the control switch (S) alone is switched on.

If the energy supply is switched on by the (TT) button, the actual temperature of the boiling pan is shown on the display (AT) and the excess pressure in the boiling pan jacket is shown in bar on the display (AZ). To emphasis the latter, a "P" is placed in front of the pressure value.

HACCP

Appliances can be optionally equipped with the program-linked cooking process procedure THERMACAM. Cooking processes can be programmed, analysed, logged and documented and are thus part of the HACCP system (HACCP = hazard analysis and critical control points).

- The program system is started by pressing the HACCP button (C).
- The lamp (LC) lights up.
- The number of the cooking program appears on the display (AZ): HP 00 to 99.
- The program number can be changed by turning the knob (Z).
- After setting the desired program, the cooking process is started by pressing the key (TT).
- The nominal temperature is shown on the display (AT) and

the cooking time appears on the display (AD).

- The program-linked cooking process is switched off by pressing the HACCP button (C). The appliance is then switched off according to 5.5.

A separate set of operating instructions contains information on the programming, analysing, logging and documenting of cooking processes using an external computer.

4.7 Altering the pan settings

Altering the nominal values while working

All the nominal values programmed in originally can be easily altered during the working process by setting the buttons for temperature (T), for the cooking time (D) and for the starting time (Z) to the new values. When the buttons are turned, the nominal value will appear flashing on the relevant display. If the nominal value is not altered for a few seconds, the display reverts to the actual value.

Altering the cooking programmes while working

Switching off the button (TT) will interrupt the heating/cooking process. Switching off the cooking time button (DT) reverts to continuous cooking. Switching off the starting time button (ZT) deletes the programmed-in starting time. The appliance can be started manually.

4.8 Tilting

MECHANICAL TILTING

The boiling pan is tilted with the help of an electric motor. It only works when the power isolator (H) (only available as an option) and the control switch (S) are switched on by turning from position 0 to I.

Lamp (LS) will light up.

Tilting at variable speed by turning the tilting knob (K):

Emptying the pan turn to the right

Tilting back turn to the left

Turning the knob further will accelerate the tilting function.

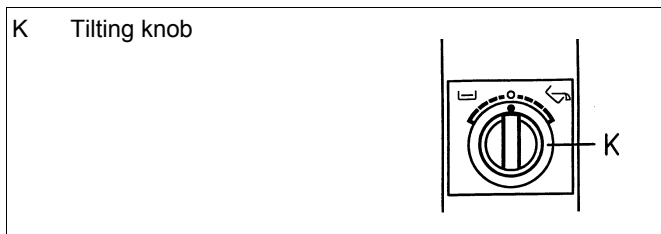


Fig. 6 Left-hand console (at the top)

Tilting is only to be activated with lid fully open and with the swivel outlet of the water mixing unit in the correct position (precisely towards the front) and where no object is present under the appliance in the tilting zone. The boiling pan is tilted down by turning tilting switch clockwise (to the right) and tilted up by turning it anticlockwise (to the left). Tilting at variable speed will only take place as long as the tilting switch (K) is held in the tilting position. On being released, the switch returns to the neutral, centre position and due to the drive self-locking, the boiling pan immediately comes to rest, whatever the position and filling level. The tilting motor is automatically switched off in the extreme positions of the boiling pan; the horizontal and fully tilted positions, so any further actuation of the tilting switch (K) has no effect.

The heating can no longer be operated with even the smallest degree of tilt from the horizontal.

Select the rate of tilting so that the produce is discharged in the region of the pouring lip. This is easy to do by varying the tilting speed. Avoid spillage of the contents over the rim of the boiling pan.

4.9 Switching off

The appliance is shut down by turning the power isolator (H) (available as an option) as well as the control switch (S) to zero. All lights will go out when this is done.

In the case of faults, the appliance must also be disconnected from all supply connections (mains supply, steam and hot-water, etc).

4.10 Power failure

The loss of mains electricity while a cooking pan is being used can result in cooking being halted or interrupted. Cooking staff are then required to make an additional intervention in the controls or to monitor further processing.

Power failure when:	The measure to be implemented to restart the cooking process after the mains supply has been restored
The cooking process is taking place	Press the key (TT)
The cooking process has been programmed with a starting time although this has not yet expired	After the mains supply has been restored, the starting time comes to an end and the heating process starts automatically without any intervention in the controls

4.11 Cooking and chilling with a CHILLTHERM

Manual and automatic control options for cooking and chilling (or vice versa) in association with an external cooling-water installation or with water from the mains supply.

To switch on:

Switch on control switch S.

MANUAL CHILLING

Programming the chilling temperature and chilling time (or only one function)

- The program is activated by pressing button M until lamp LM lights up (press for approx. 2 seconds).
- Press button M briefly to enter the chilling temperature.
- Use chilling-temperature button T on display AT to set the desired chilling temperature; a C with the temperature display will flash on display AT.
- Switch on the mixer with switch RS (an intermittent signal will sound if the mixer is not activated and error A03 will be displayed).
- All preprogrammed functions are started by pressing button TT.
- Lamp LT will flash until the chilling temperature is reached and will then stay on permanently; this also applies to chilling-time lamp LD if this has been selected.
- A signal will sound as soon as the chilling temperature is reached; press button Q to confirm.
- The chilling temperature reached will now be maintained exactly. Press button TT to end manual chilling.

COOK & CHILL (automatic cooking and chilling)

Programming cooking and chilling times and their starting time (if required)

- The cook & chill program is switched on by pressing button H; lamp LH will light up.

Programming the cooking process:

- Enter the desired cooking temperature using cooking-temperature knob T on display AT.
- Enter the desired cooking time using cooking-time knob D on display AD; lamps LD and LH will light up.
- The starting time can also be entered as follows:
- Press the button (ZT) and use the starting-time button (Z) on the display (AZ) to set the desired starting time, the

lamp (LZ) will light up.

Programming the chilling process:

- Press button M briefly. The display AT flashes and a C appears behind the temperature indication. During this announcement the cooling temperature can be set.

CHILL temperature set: A three digit display (AT) indicates:

C for Chill,

32 - 95 the temperature between 32 and 95°F

00 - 120 the temperature between 100 and 120°F

Owing to the internal conversion in °C not every value is possible. The following settings are allowed:

Display	Hold-Temperature	
	°F	°C
C32	32	0
C41	41	5
C50	50	10
C59	59	15
C68	68	20
C77	77	25
C86	86	30
C95	95	35
C04	104	40
C13	113	45
C20	120	49

- Use chilling-temperature knob T on display AT to set the desired chilling temperature.

The chilling time can also be entered as follows:

- Press button DT and use chilling-time knob D on display AD to set the desired chilling-time period.

Start chilling & cooking programming:

- Switch on the mixer with switch RS (an intermittent signal will sound if the mixer is not activated and error A03 will be displayed).
- Press button TT

While this process is taking place, each of the currently active lamps LT and LD will flash for control purposes.

At the predetermined starting time, a signal will sound three times for control purposes; the predetermined chill & cook processes will now operate with lamps LT and LD flashing if previously selected.

- When the cooling temperature has been reached, a signal will sound until confirmed by pressing button Q.
- The cooling temperature attained is now maintained.
- Now press button TT to end the cooking & chilling process.

- TT Button, activation of settings
- LT Lamp, cooking temperature
- DT Button, cooking time
- LD Lamp, cooking time expires
- ZT Button, starting time
- LZ Lamp, starting time
- LH
- LM Lamp, program activation
- M Button, chilling
- H
- Q
- AT Display, chilling temperature
- T Button, chilling temperature
- AD Display, remaining cooking time
- D Cooking time knob
- AZ Display, time
- Z Starting time knob
- LF
- F

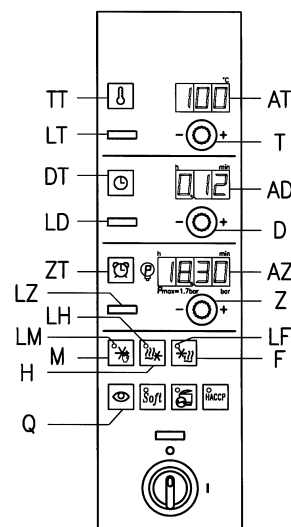


Fig. 7 Right console

CHILL & COOK (automatic chilling and cooking)

Programming chilling and cooking durations and their starting time (if required)

- The chill & cook program is switched on by pressing button F. Lamps LF and LZ will light up.

Programming the chilling process:

- Press button M briefly and use chilling-temperature knob T on display AT to set the desired chilling temperature as explained in COOK & CHILL; a C with the temperature display will flash on display AT.
- The starting time can also be entered as follows: Press button ZT and use starting-time knob Z on display AZ to set the desired starting time; lamp LZ will light up.

Programming the cooking process:

- Use cooking-temperature knob T on display AT to enter the desired cooking temperature.
- Use cooking-time knob D on display AD to set the desired period of cooking; lamp LD will light up.

Start chilling & cooking programming:

- Switch on the mixer with switch RS (an intermittent signal will sound if the mixer is not activated and error Z A03 will be displayed).
- Press button TT
 - While this process is taking place, each of the currently active lamps LZ, LT and LD will flash for control purposes if previously selected.
 - At the predetermined starting time, a signal will sound three times for control purposes; the predetermined chill & cook processes will now operate with lamps LT and LD flashing if previously selected.
- When the cooking temperature has been reached, a signal will sound until confirmed by pressing button Q.
- The cooking temperature attained is now maintained.
- Now press button TT to end the chilling & cooking process.

CHILLTHERM (general)

Application

Cooking followed by rapid chilling to 41 - 59°F (5° - 15°C) in one and the same cooking pan enables the food to be stored in portions or in larger containers for a lengthy period of time in a refrigerated store without any loss in hygiene or quality. In this respect, the cook & chill system can be considered a suitable process for the preparation, planning, economy of use and transport, etc. of food.

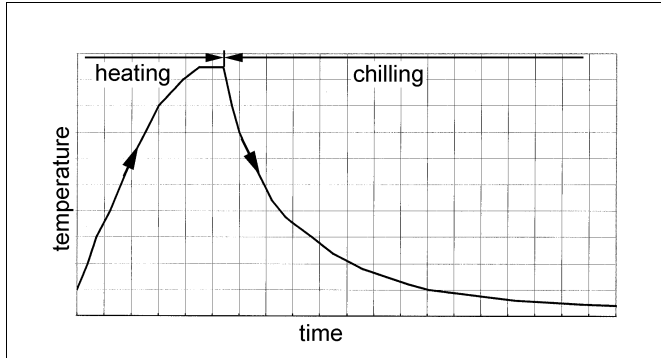


Fig. 8

End of chilling

If the chilling time is also activated in addition to the chilling temperature, the chilling system will switch off when first reaching one of the values (chilling temperature or chilling time) and will keep the predetermined temperature constant until the appliance is switched off.

Release

At the end of the cooking process, the steam pressure is automatically released from the heating jacket to prevent the cooling aggregate from being subjected to additional heat.

Program changes

The cook can manually override the programmed values at any time while all processes are taking place.

Mixer

In order to minimize heating and chilling times, the mixer with its wipers must run during cooking & chilling processes (otherwise the error A03 occurs); only in one direction of rotation with foods thin in consistency but in alternating directions when cooking foods that are thick or compact in consistency.

Combined chilling

In the case of sequential chilling, i.e. with mains water in the upper temperature range of the food and with cold water from a chilling unit in the lower range, the person in charge of installation must enter certain corresponding parameters in the electronic control system (q.v. installation instructions).

Parameter P36 to 1, P37 to 1, P163 to the desired food temperature in °F at which the changeover from mains water to cold water is to take place (standard setting is 104°F (40°C)).

5. STIRRING SYSTEM

The advantage of the optionally installed stirrer is the achievement of uniform temperatures, effective mixing of the produce and hence, homogeneous cooking results throughout the boiling pan. By means of scrapers, produce is also removed from the boiling pan wall, preventing the formation of thicker layers on the heated surfaces. The stirrer also serves to break up or puree cooked produce. The boiling pan can be operated with and without stirrer as required.

Mounting the stirrer

With lid open and power off, the stirrer (11) is placed on the drive shaft (14) and the square section of the shaft introduced fully into the square opening of the stirrer. To lock the stirrer, the clip (15) on the stirrer is placed in a horizontal position and engages in the two notches in the square section of the shaft (14). To remove the grid stirrer (11), clip (15) is folded to the horizontal position on the other side and the stirrer withdrawn from the shaft (14) upwards.

- 11 Stirrer
- 14 Drive shaft
- 15 Clip

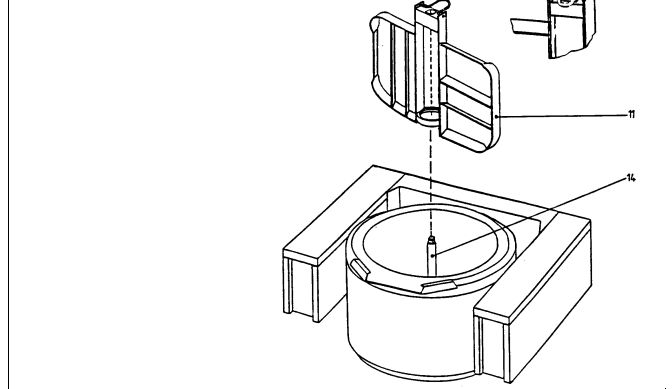
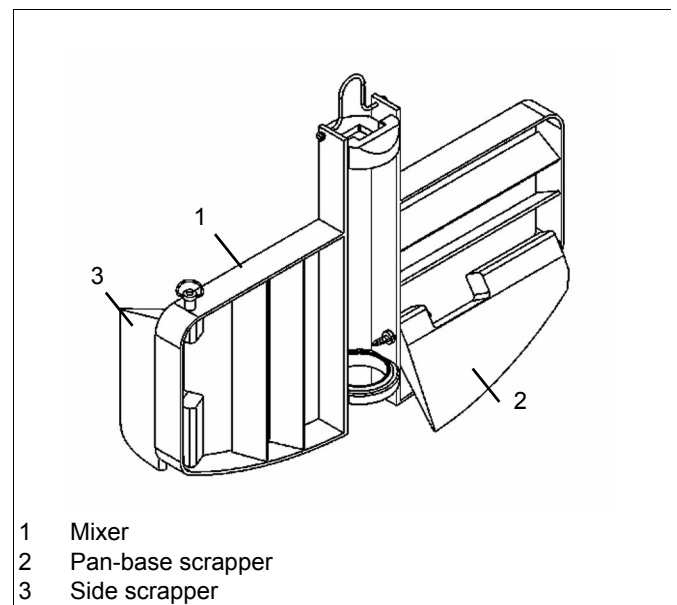


Fig. 9 Stirring system

Mixer with scrapers

The purpose of the mixer is to mix the food thoroughly to ensure even cooking. The scrapers are intended to wipe off any food sticking to the wall of the pan for remixing with the food. The scrapers are made of POM-C (Polymethylene copolymer) and are approved for use with food.



- 1 Mixer
- 2 Pan-base scraper
- 3 Side scraper

Fig. 10 Stirring system

Fitting the scrapers

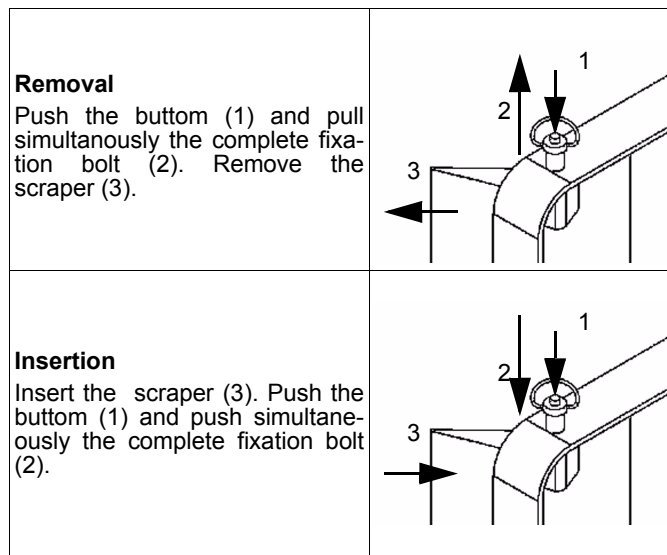


Fig. 11 Fitting the scrapers

Operating the stirrer

Starting the stirrer:

- Close the lid
- Place main switch (H), where fitted, to the On position.
- Switch on the control switch (S)
- Set stirrer switch (RW) as required according to the following operating programme:

Position (RW) Function

0	Stirring system switched off.
10 o'clock	Stirrer rotates continuously on same side clockwise.
2 o'clock	Stirrer rotates alternately right and left with a 4 second rest period and a 16 second running period.
3 o'clock	Stirrer rotates alternately right and left with a 16 second rest period and a 16 second running period.

The choice of programme is dependent on type of produce. Step "left" is adequate for very fluid produce; steps "right" are used for thick produce which is difficult to mix.

Safety measures

Always keep lid closed when operating the stirrer.

- The stirrer remains at rest after a power failure. It can only be restarted by actuating the stirrer switch (RW), ie. first set to position 0 and then back to the required programme.
- No objects (eg. mixing spoons, measuring rod, etc.) are to be placed in the pan whilst the stirrer is running.
- In the event of faults, blockage or the occurrence of unusual noise, the stirrer switch (RW) must be placed immediately to position 0. The stirrer may not be switched on again until the fault has been remedied.
- If the drive motor is overloaded, the stirrer is switched off by a thermal cut-out. Switch (RW) is to be immediately placed to position 0. Further operation of the stirrer is only possible when the cut-out has cooled.
- If the drive motor is frequently overloaded and cuts out, the produce is too stiff. Stirring can be maintained by thinning or by removing part of the produce.

Shutting down

Place stirrer switch (RW) to position 0.

Emergency shutdown

The stirring system can be shut down by pressing the red button (N). The red button will remain depressed until it is turned clockwise. To switch on again, the stirring system switch (RW) must be turned to position 0 and then reset to the setting of the desired operating programme. The stirring system will recommence operation after a delay of a few seconds.

RW Stirrer switch
N Stirrer button,

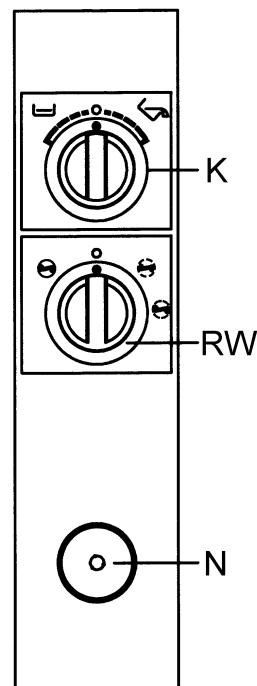


Fig. 12 Left console

Mixing when the lid is open

(only if a lid contact switch is fitted)

During normal operation, the lid limit switch automatically switches off the mixer if the lid is opened during operation. However, it is possible to deactivate the lid limit switch temporarily in order to observe or check the food during mixing with the lid open or if it is necessary to add certain ingredients evenly to the food.

Bridging the lid limit switch:

The mixer is switched on to a selected operating level. Switch (RW).

The button (U) on the right-hand console is then pressed and held down. After 2 seconds, the bridging of the limit switch is activated with the lid open.

While the button remains held down, an intermittent signal is heard and the lamp (LU) goes on and off.

Releasing the key (U) will cause the mixer to stop.

Closing the lid again will cause the mixer to recommence operation.

NB: The lid limit switch can be bridged during all the working programs of the mixer. Please note that the mixer is subject to interruptions in operation of between 4 and 16 seconds dependent on program. If bridging is started during one of these interruptions, it will be necessary to wait with bridging until the mixer starts again. Working with utensils or reaching into the pan is absolutely prohibited while the mixer is still switched on (switch RW).

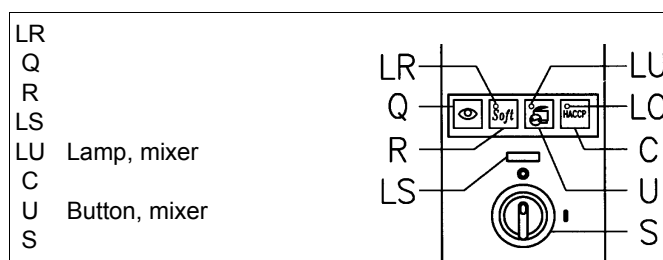


Fig. 13 Right console

6. ADDITIONAL EQUIPMENT (optional)

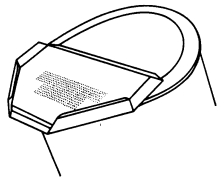
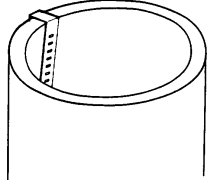
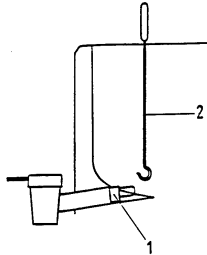
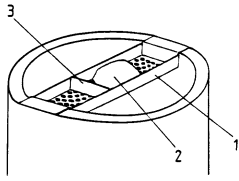
Strainer The strainer appropriate for the size of pan is firmly inserted into the two retaining clips fitted to the sides of the pouring lip.	
Measuring rod The measuring rod with filling level marking is hung on the top rim of the pan. The scale has 5 or 10 litre graduation marks. The measuring rod must not be used at the same time as the stirrer as this may result in injury.	
Discharge strainer To prevent blocking the discharge tap when pouring liquids from the boiling pan, a discharge strainer (1) can be placed in the discharge pipe of the boiling pan. The strainer is fitted and removed with the aid of a hooked rod (2).	
Strainer for dough dumplings and scraper This accessory is for producing Knöpfli or dough dumplings. The strainer (1) is hung in the compartment. The dough (2) is placed in the strainer. Over the hot water in the compartment, the dough is pressed through the holes in the strainer by moving the scraper (3) back and forward to form droplets.	

Fig. 14 Accessories

7. CLEANING

The appliance should be allowed to cool prior to cleaning.

Compartment

With normal use it is sufficient to clean the compartment with hot water with an added grease solvent. Next, rinse with clean hot water and dry with a cloth or absorbent paper. There is a risk of corrosion if water with a high-salt content and/or food are allowed to dry out in the pan.

Appliance casing

The appliance surfaces are of corrosion-free chrome nickel steel. They are to be washed down with hot soapy water containing a standard grease solvent cleaning agent and dried off.

General

Cleaning with steel brushes, wire or copper wool, products containing sand etc. is to be avoided as such media will destroy the surface and provide the opportunity for it to be attacked and start to corrode. Spraying the appliance or its parts with a water jet or high pressure cleaning equipment is harmful and can cause malfunctions. Such practice is therefore forbidden. The drain in the cover plate, the bottom grid or internal drain can be cleaned with a bottle brush.

Additional equipment, stirrer, strainer etc.

These loose parts are to be cleaned outside the boiling pan. Where dimensions allow, these can be washed in a suitable dishwasher.

Desinfection of scrapers:

The scrapers are locked to the stirrer with a bolt, which is located inside the food zone. These parts must be disinfected at regular intervals at temperatures above 179.6°F (82°C). Best is to accomplish the disinfection after every food preparation below 179.6°F (82°C).

8. TROUBLESHOOTING

Faults in the appliance are registered by the control electronics and shown on the display (AT) dependent on the type of fault by the letters A or E in combination with a double-digit number. When the fault occurs, an intermittent acoustic signal sounds, the power supply is interrupted and the lamp is switched off. Press button (Q) again to acknowledge the error message (acoustic signal).

Shut down the appliance if a continuous fault that prevents operation arises (see section 5.5 Shutting down). Summon the aftersales service to remedy the fault. Until this is done, the appliance must not be used and must be disconnected from the mains supply.

E1	Failure of food temperature sensor	Summon service agent and report reading
E2	Failure of jacket temperature sensor	Summon service agent and report reading
E3	Failure of deaeration food temperature sensor	Summon service agent and report reading
E5	Failure of control circuit board temperature sensor	Summon service agent and report reading
E6	Sensor J15 of produce temperature too high	Summon service agent and report reading
E7	Sensor J16 of jacket temperature too high	Summon service agent and report reading
E8	Jacket pressure too high	Summon service agent and report reading
E9	Failure of A/D converter	Summon service agent and report reading
E10	Safety thermostat for dry cycle protection has responded	Summon service agent and report reading
E11	Sensor of deaeration temperature too high	Summon service agent and report reading
E30	Stirring drive motor overload	Remedy the cause of the breakdown, allow to cool off, press button (Q) and restart the stirrer (set switch (R) at 0 and switch on again)
E31	Advance warning: the water in the jacket is due for topping up	Acknowledge the warning by pressing the button (Q). The appliance can continue to be used. The warning is given whenever the appliance is reused. Summon service agent occasionally and report reading.

9. TREATMENT OF COMMERCIAL KITCHEN APPLIANCES

Commercial kitchen appliances are executed in corrosion resistant chrome nickel steels, material numbers 1.4301 and 1.4404.

The corrosion resistance of these steels is based on a passive layer formed on the surface with access to atmospheric oxygen. Accelerated formation or reformation of the passivity occurs by treating surfaces with running water containing oxygen. Aggressive media with a reducing effect (oxygen consuming) such as substances containing hydrochloric acid, chlorides and seasoning concentrates, mustard, vinegar essence, seasoning or spice tablets, salt solutions, etc., depending on concentration and temperature, can result in chemical damage or the destruction of the passive layer. Damage can also result from foreign rust (iron particles) due to the formation of galvanic elements and lack of oxygen (no air access or low oxygen water).

Therefore the following principles should be observed when working with high grade steel equipment:

1. Surfaces of equipment of corrosion resistant steel are always to be kept clean and exposed to the air. Remove covers from utensils when not in use to provide free air access. Regularly remove limescale, grease, starch and egg white deposits by cleaning. Corrosion can occur under these layers due to the absence of air exposure. Limescale can be removed with 10% acetic acid, 10% phosphoric acid or with suitable limescale removers available on the market.

2. Corrosion resistant steel objects must not be kept in long-term contact with acids, spices and seasonings, salt, etc. Also promoters of corrosion are acid vapours as produced during floor cleaning. Contact surfaces are to be rinsed off with fresh water. This applies after use, especially after cooking potatoes, noodles, rice etc. in salt water. Dried-on cooking water residues form high concentration salt solutions which can cause point corrosion. So, immediately after use, rinse cooking utensils in fresh water or keep filled with cold water to cool them. It is not advisable to use one utensil exclusively for cooking e.g. potatoes in salt water. For stainless steel it is beneficial to use utensils for different produce, e.g. for soups containing fat or acid-containing vegetables (such as sauerkraut, for example).

3. Stainless steel surfaces should, where possible, be protected from mechanical damage, especially from other metals. Corrosion can occur if stainless steel comes into contact with iron (steel wool, chips from pipes, water containing iron). New corrosion locations can be removed with a mild abrasive or fine emery cloth. Heavier corrosion can be washed off with a warm 2-5% solution of oxalic acid. Treatment with 10% nitric acid is necessary if this proves ineffectual. Due to the associated hazards, this type of cleaning is only to be carried out by suitably trained staff in compliance with the valid regulations.

4. No bleaching or chlorine-containing cleaning agents are to be used for cleaning. Utensils are to be thoroughly rinsed with water and dried after cleaning. The surfaces of appliances are of corrosion resistant chrome nickel steel. They are to be washed down with hot soapy water with the addition of a standard grease solvent. Avoid cleaning with steel brushes, steel wool, copper scouring pads or cloths, products containing sand, etc. as such media destroy the surfaces and create the conditions for corrosion formation. Spraying appliances or parts of appliances with a water jet or high pressure cleaning equipment is harmful and can cause malfunction. This is therefore prohibited.

Note:

The **type** and **concentration** of solvents used for cleaning the surfaces must comply with the code of the Federal Regulations 21 CFR Part 178.1010.